

ABSTRACT OF THE DISCLOSURE

Ethylene and optional comonomers are polymerized using a supported metallocene catalyst, an alumoxane activator, and triisobutylaluminum (TIBAL). A silica support is first pretreated with a
5 silane compound and then with an organoboron compound. The treated silica is then combined with a Group 4 metallocene complex and an alumoxane to generate a supported, activated catalyst. While it was previously thought that the particular support treatment technique used herein provided benefits only for polymerizations catalyzed by non-
10 metallocene single-site complexes, it has now been found that similar benefits can be realized even with conventional metallocenes if TIBAL is selected as the scavenger.